REMARKS

Claims 1-2, and 4-17 are pending in the application. Claims 1, 10, and 12 are amended, and claim 3 is canceled. Claims 10 and 11 were withdrawn from consideration by the Examiner because they are "drawn to a method of manufacturing a vacuum fluorescent lamp, classified in class 315, subclass 167." Office action page 2. Applicant respectfully disagrees with the Examiner's assertion. Claims 10 and 11 are directed to a method of producing an image on a vacuum fluorescent lamp, and not drawn to a method of manufacturing a vacuum fluorescent lamp.

A provisional election was made by Mr. Bruce Prout on 6/17/02. Subsequently, in a telephone conference between the undersigned and the Examiner on 8/6/02, the Examiner agreed to withdraw the restriction requirements and reconsider the patentability of claims 10 and 11. Applicant submits that the claims 10 and 11 are patentable over the cited references, and reconsideration and allowance of this application are respectfully requested..

The drawings were objected to under MPEP § 608.02(g) requiring that FIG. 5 be designated by a legend such as Prior Art. FIG. 5 has been amended to include the legend Prior Art. Enclosed is a Transmittal of Drawings letter with sheet 3 of drawing that includes FIG 5 with changes marked and a clean copy of formal drawing to replace the original FIG. 5. No new matter has been added. Accordingly, it is requested that the above objection be withdrawn.

Claims 1-6 are rejected under 35 U.S.C § 103 (a) as being obvious over Mera et al. 4,122,376 in view of Tatsuda et al. 4,972,116, Hase et al. 4,208,613 and Curtin et al. 5,686,790. Claim 7 is rejected under 35 U.S.C § 103 (a) as being obvious over Mera et al., Tatsuda et al., Hase et al., Curtin et al. and Tischer 4,588,921. Claims 8 and 9 are rejected under 35 U.S.C § 103 (a) as being obvious over Tatsuda et al., Hase et al., Curtin et al. and Fahlen et al. 5,589,731. Claims 12-15 are rejected under 35 U.S.C § 103 (a) as

being obvious of Mera et al. in view of Tatsuda et al. Claim 16 is rejected under 35 U.S.C § 103 (a) as being obvious over Mera et al. in view of Tatsuda et al. and Tischer 4,588,921 for the reasons set forth on page 9. Claim 17 is rejected under 35 U.S.C § 103 (a) as being obvious over Mera et al. in view of Tatsuda et al. and Fahlen 5,589,731.

Applicant submits that all of the pending claims 1-2, and 4-17 are patentable over the cited references, and reconsideration and allowance of this application are respectfully requested.

Mera et al. discloses a multi-indicia fluorescent display (FDT). The FDT of Mera includes a diffusion electrode 28 electrically connected to an electrification-preventing layer 24. See column 5, lines 10-12, and FIGs. 1-4. This diffusion electrode is operated by a positive applied potential to "diffuse the electron current following from the cathode 22 to each segment anode 18 thereby to form an electric field which can level the density of electrons.". Column 5, lines, 14-20. Emphasis added.

In contrast, in the disclosed invention, a "negative potential" is applied to electron control means generating a (repulsive) electric field to allow "acceleration of electrons" emitted from the electron emissive means toward the display means. In deed, by applying a negative potential to the electron control means to accelerate the electrons (i.e., a repulsive force towards the display), the present invention teaches away from the diffusion electrode of Mera to which a positive potential is applied to diffuse the electron current following from the cathode to each segment anode.

As to the claims, the amended independent claim 1 includes, among other limitations, "an electron control means for generating a repulsive electric field when a negative potential is applied thereto to allow acceleration of electrons emitted from the electron emissive means in the direction of the display means," amended independent claim 10 includes, among other limitations, "applying a negative

potential to the electron control means to repel and accelerate the emitted electrons toward the display means," and amended independent claim 12 includes, among other limitations, "an electron controller to allow repulsion and acceleration of electrons toward the display when a negative potential is applied thereto." Emphasis added.

Likewise, none of the cited references disclose or suggest "an electron control means for generating a repulsive electric field when a negative potential is applied thereto to allow acceleration of electrons emitted from the electron emissive means in the direction of the display means," "applying a negative potential to the electron control means to repel and accelerate the emitted electrons toward the display means," and "an electron controller to allow repulsion and acceleration of electrons toward the display when a negative potential is applied thereto," as required by the independent claims 1, 10, and 12, respectively.

In short, the independent claims 1, 10, and 12 and the respective dependent claims 2, 4-9, 11, and 13-17 define a novel and unobvious invention over the cited references.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made**.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice Amended) A vacuum flourescent display comprising:

a pair of substrates and side glasses surrounding an evacuated envelope;

an electron emissive means for emitting electrons when a negative potential is applied;

a display means, provided on one of the substrates in the evacuated envelope, capable of having a positive potential applied thereto, for displaying a predetermined image in response to electrons emitted from the electron emissive means; and

an electron control means for generating a repulsive electric field when a negative potential is applied thereto to allow acceleration of electrons emitted from the electron emissive means in the direction of the display means,

wherein the electron emissive means is located between the display means and electron control means.

10. (Amended) A method of producing an image on a vacuum fluorescent display, comprising:

providing a vacuum fluorescent display having an evacuated envelope enclosed by two substrates and side glasses, a display means provided on one of the substrates in the evacuated envelope, an electron control means, and an electron emissive means located between the display means and electron control means;

applying a negative potential to the electron emissive means to emit electrons;

applying a positive potential to the display means to attract the emitted electrons; and

applying a negative potential to the electron control means to repel and accelerate the emitted electrons toward the display means.

12. (Amended) A vacuum flourescent display comprising:

a pair of substrates and side glasses surrounding an evacuated envelope;

a display provided on one of the substrates in the evacuated envelope;

an electron controller to allow repulsion and acceleration of electrons toward the display when a negative potential is applied thereto; and

an electron emitter located between the display and electron controller.